

### **EXAMINER'S AMENDMENT**

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with John Parthum on May 12, 2010.

The application has been amended as follows:

#### **In the Claims:**

A) Line 10 of claim 18 should be amended to add "wherein the positional-posture and arm-pointing recognition means for extracting arm pointing recognizes the pointing action in such a way that: the pointing-action recognition means divides three-dimensional distance information obtained from the plurality of stereo cameras into levels by 20 cm according to an indoor coordinate system by a different-level extracting method; projects a dot sequence in each level onto a two-dimensional plane and then binarizes the dot sequence into a two-dimensional binary image; labels two-dimensional binary images on a level-to-level basis; determines the overall center of gravity of clusters; stacks a center of gravity determined in each two-dimensional plane in levels on object-to-object basis again to use as a three-dimensional dot sequence; plots the center of gravity of each level along a Z-axis, in which eight levels (an upper half of a

body) from an uppermost level (a head) are plotted on the X-Y plane" after the word "arm" and before the word "wherein" on line 11 of claim 18.

The following is an examiner's statement of reasons of allowance: The present invention involves an interface apparatus with image processing, a positional-posture and arm-point recognition, and pointing-action recognition means, which was not novel but in these elements in combination with the details of claim 5 and 18 such as but not limited to "wherein the positional-posture and arm-pointing recognition means for extracting arm pointing recognizes the pointing action in such a way that: the pointing-action recognition means divides three-dimensional distance information obtained from the plurality of stereo cameras into levels by 20 cm according to an indoor coordinate system by a different-level extracting method; projects a dot sequence in each level onto a two-dimensional plane and then binarizes the dot sequence into a two-dimensional binary image; labels two-dimensional binary images on a level-to-level basis; determines the overall center of gravity of clusters; stacks a center of gravity determined in each two-dimensional plane in levels on object-to-object basis again to use as a three-dimensional dot sequence; plots the center of gravity of each level along a Z-axis, in which eight levels (an upper half of a body) from an uppermost level (a head) are plotted on the X-Y plane" put the present invention in condition for allowance.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHIKAODILI E. ANYIKIRE whose telephone number is (571)270-1445. The examiner can normally be reached on Monday to Friday, 7:30 am to 5 pm, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha D. Banks-Harold can be reached on (571) 272 - 7905. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Marsha D. Banks-Harold/  
Supervisory Patent Examiner, Art Unit 2621

/Chikaodili Anyikire/  
Patent Examiner AU 2621